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"SMALLPOX."

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[Communicated for the Boston Medical and Surgical Journal.]

THERE appeared in the *Boston Courier*, a few days ago, an article with the above title, which much pleased me. Its sketch of the history of inoculation was excellent, as were also its remarks on the obligation and duty of vaccination as securing one's own safety, as well as the safety of others. A vaccinated person may have varioloid—something like smallpox—but not it, generally a mild disease, and very rarely fatal; but it will give genuine smallpox to the unprotected by vaccination, with its present dangers, and horrors; and, if not fatal, its terrible and sure deformity by and by.

I liked the article referred to, because it comes from the laity, not the faculty. The latter is sometimes thought, in its popular addresses or recommendations, to speak from professional interest, or from another interest which begins with a *p*. But the laity has neither fame nor money in its hints to the people, and hence its frequent influence.

There is one matter in our subject, viz., vaccination, which did not lie in the scope of the *Courier's* writing, and it will make the subject of what follows. I refer to the objections which exist in regard to it. These are widely current, and have an influence which those out of the profession have no notion of. One of them, and the most important, is this: the possibility, and to many the certainty, or strong probability, that various diseases, humors, &c., may be introduced into the body by vaccination. I have been a physician, man and boy, student and practitioner, towards sixty years. I began medical study April 15, 1807. My master in medicine was—and is—Dr. James Jackson, still in active practice, and now verging on 83. And where a wiser or better master? Dr. J. returned from London in 1800, having been absent about a year. While attending the London Borough Hospitals, notice was given to the class that pupils would be received at the St. Pancras

VOL. LXII.—No. 5

Smallpox Hospital, then under the charge of Dr. Woodville, and where they would have an opportunity of observing cases of vaccination. Only two, Dr. J. being one, availed themselves of this opportunity to acquire, under the most favorable circumstances, the whole history of the disease, and also the best rules for communicating it to others. Dr. Jackson continued his attendance at this Hospital for several weeks. He made a complimentary call on Dr. Woodville the day before his departure, who at that moment was examining the last proof-sheets of his latest work on Vaccination, it being wet from the press. Dr. W. gave him the copy in that state. This pamphlet was especially valuable to Dr. J., on account of its history of spurious cases, which it would seem were much more frequent than at present, and which were ascribed to matter taken too late in the disease, viz., when the areola was perfectly formed, and the matter had become *opaque*. It may be added that Dr. Woodville did not write on vaccination till he had obtained the evidence of 800 cases to its entire safety.

Vaccination was discovered by Jenner in 1770.* I have been told that Mr. Cline, one of the surgeons of the Borough Hospitals, had discovered it earlier, or at about the same time. But he had not published his discovery, or practised it. He was apprehensive, it is said, that as the matter came from an animal so essentially different in many respects from the human, some terrible product might come of vaccination. Mr. C. had obtained it from the cow. He knew perfectly well that milkers had had the disease, and had in consequence been exempt from smallpox. One is reminded of Newton's course in regard to a very important discovery of his in mathematics—the differential calculus. He allowed the paper which contained this discovery to lie at rest in a drawer for twenty-five years. At the end of this time, Leibnitz made the same discovery and published it, and notwithstanding this, and notwithstanding the fact that his notation was a much better one than Newton's, the honor of the discovery was adjudged to Newton. The result was a most bitter quarrel between these two great men and former friends, which was only covered up by the grave.

Cline, though so long and so intimately acquainted with vaccination, made no claim to the discovery, but, in 1798, quietly introduced it into London.

Thornton says, in his "Facts Decisive in favor of the Cowpock," London, 1803, now lying before me, "that in July, 1798, he (Cline) received some vaccine matter from Dr. Jenner, with which he inoculated a boy who had not had smallpox. When he had gone through the stages of vaccine inoculation, he tried to infect him with the smallpox by inoculation, *but in vain*; this circumstance,

* "The first cases ever laid before the public on this interesting subject (vaccination) are those by Jenner. His first case was Joseph Merrett, under-gardener to the Earl of Berkley, in 1770. Joseph was repeatedly inoculated afterwards—once 25 years after cowpox—but without effect."—*An Inquiry into the Causes and Effects of Cowpox. By Edward Jenner.*

together with the communications he received from Dr. Jenner, produced the strongest convictions in his mind of the great utility of the practice," &c.

Dr. Jackson, having fully prepared himself for vaccination, brought vaccine matter from London, having obtained it from Dr. Woodville, with whom we have seen he had studied vaccination, and tried it in Boston. It failed. He then applied for some from a physician, who advertised that he would supply others with matter, but failed to get any. Fortunately, he learned that his friend, Dr. Manning, of Ipswich, had succeeded in his vaccinations. He drove there immediately, and found a lady in whom the disease was in the best state possible for use, and she was kind enough to come to Boston with the Dr., and from her arm quite a number of patients were at once vaccinated. From this time Dr. J. was constantly vaccinating, and had the amplest opportunities for observing the disease, and for comparing his cases with the large numbers he daily saw in St. Pancras Hospital.

But why this history? Why this re-statement of old facts? Because of their permanent value, recording as they do one of the most important discoveries in the history of the race, and made by a man wholly worthy such a distinction. Again and again was Jenner pressed, and by long-tried friends, to consider himself, as well as the public whom he had so truly and generously served. A writer of his—Jenner's—time, thus writes:

"Had Dr. Jenner, the favorite pupil of the famous Hunter, chosen to rank himself with the *legal murderers* of the human race, and taken out a *patent*, which he might have justly and easily obtained, the richest man in England would have had no reason to boast with him—there would have been no limit to his gains; and seeing how mankind, great and little, run after quackery, he might have rode triumphant in his chariot, as the *head* of that *horrid monster of destruction*. But he spurned the very thought; and, so far from using even the *mystery* seen sometimes in the profession, was open and candid; and while government rewards him, the whole universe is uttering his praises, and raising to Heaven prayers for his prosperity, life, and happiness."

There is another reason for this history. We learn from it under what favorable circumstances vaccination was early practised among us. Dr. Jackson was thoroughly taught, by daily witnessing the disease under all circumstances, what was its whole and true history. He had daily opportunities of comparing it with smallpox, and of making a correct diagnosis. He obtained at once the confidence of those who are best able to observe the facts in the disease, and of thus aiding the practice of vaccination.

Was it not in memory of all this, that to him was entrusted the office of collecting funds for the Jenner monument in England, and that thus through him this remote country might have its share in

the public—universal honor about to be done to the benefactor of man?

But why the history? It has enabled me to obtain important information on a point concerning the entire safety of vaccination. In a recent visit to Dr. Jackson, I asked if he had met with any instances, and how many, of diseases of any kind being introduced by vaccination. He said he had never met with an instance. Here is the testimony of a careful and accomplished inquirer, to a most important fact in the history of vaccination. Here is the testimony of 60 years to the entire safety of vaccination. This testimony may well rest alone. But if it can be added to, may I not appeal to my own observation for more than half a century concerning the same important inquiry? Not an instance has been observed by me of the introduction of any disease by vaccination. It is a beautiful fact, is it not? in this history, that vaccination exerts its wonderful power with scarce any evidence that any morbid process is at work in the system. Yes, entirely removes the susceptibility to smallpox, one of the most painful, terrible, fatal of diseases, and all this without making any "sign."

Notwithstanding all this testimony, apprehensions still exist of the dangers of vaccination. There was much reasonableness in the opposition it met with upon its promulgation by Jenner. For a quarter of a century he had faithfully studied cowpox, lest some unseen evil from it might discover itself, and when at length he offered it to the public, it was with that entire confidence which long and patient experience and observation authorized. In America it was almost new, when, in 1800, Dr. Jackson entered into the service of its promulgation. It was but one year after Cline had introduced it into London. Let me here give an anecdote which I have heard told of an early vaccination, or rather purpose to vaccinate. It was an infant to whom Dr. — was called. The mother's fears, before expressed, had been quieted or removed, but when the day came she shrank under a sense of the responsibility of her position, and could not possibly have the operation done. The Dr. was to call again in a few days for the same purpose. He did so, and found the infant covered all over with a deep and most *alarming* eruption! Suppose, for a moment, that this had happened after vaccination. A lady—a mother—position—wealth—influence—a beautiful child—fair—lovely—a newly born—an only one—and now—what! how! covered with loathsome disease. What not? Heart fails. What *would* have happened to vaccination from that "leperous distilment"? What *would* have happened to the doctor?

Let us pass from this distressing questioning to some cases which have come under my notice during the present smallpox epidemic, and which illustrate some of the views which people still entertain of vaccination, who—*save the mark*—should have known better.

CASE I.—A child was inoculated by me. The disease went most kindly through its stages, and the little boy of three or four was soon well. He was under the care of two excellent persons, sisters, middle aged, who had never been vaccinated because they had been taught to believe that the vaccine virus was a morbid poison, and would introduce all sorts of humors into their healthful systems. Well, months passed by, and the present epidemic smallpox occurred. Both of these sisters were attacked by it, about the same time, and both died. Here was the result of popular prejudice, the product of which was great ignorance, and certain, and terrible death. I say *terrible*, for if there be a disease which deserves such an epithet, it is confluent smallpox. It is not only terrible in itself, but kills out sympathy, and kindness, sometimes leaving its subjects to live and die alone, and almost denies to its victims the rights of sepulture. In a neighboring city a young student was almost left to die alone, and his fellow students had to take him and his coffin upon their shoulders, and bury him.

CASE II.—I have heard of a gentleman of education, wealth and position, who will not permit his daughter—a most interesting young lady—to be vaccinated, as she would certainly have humors of all sorts come of vaccination. To my mind, it seems far more reasonable to have feared that the young lady would have a calf, especially when we consider the cow-origin of vaccination.

CASE III.—While writing, I am called to vaccinate Miss ——. This is successfully done; the young lady being about, all the time, as if nothing had happened. I am requested to say nothing about this, as the young lady is a visitor in Boston, and the strongest fears are felt of the dangers of vaccination, and the whole weight of domestic authority has been declared against its being done.

CASE IV.—Let me next give an instance of the benign—I had almost said the beautiful—influence of vaccination, under circumstances the most unpromising.

Mrs. — had varioloid. Her sister, Miss —, took care of her. It was discovered, at the appearance of the varioloid in Mrs. —, that her sister, Miss — had not been vaccinated. She was at once vaccinated. On the seventh day, the vaccination was found to be perfect. On the eighth, when the usual progress had occurred in the vesicle, Miss — was suddenly seized with severe and most distressing rigors, intense headache, and abdominal pains. [Let me remark here, that this trouble in the abdomen has accompanied all the cases of varioloid which I have attended during the present epidemic smallpox.] Varioloid occurred three days after. The eruption was universal—covering face, head, trunk, and extremities. Large pustules soon showed themselves, distended with an opaque fluid. I have seen the very worst forms of smallpox, but no one which was worse in appearance than was this one of varioloid, only that it wanted *confluence*. The utmost danger was present; the symptoms being of

a strongly-declared character. These began to subside at the usual time. Desquamation took place, or the crusts were separated, and the patient recovered, and without a *single pit* to mark the place of any one of these countless vesicles. Her disease was varioloid; in other words, smallpox as modified and controlled by vaccination; this latter pursuing its common course, its scabs coming off about the twelfth day from vaccination. I have met with no case in which the power—the saving power of vaccination was presented after a manner more conclusive, and more calculated to strengthen popular confidence in its power over a most terrible, loathsome, fatal disease, than in this.

In order to render vaccination as accessible as possible to all classes of people, the profession and the municipal government have done all in their power. The highest fee for the operation and subsequent attendance is *five* dollars. The government has always supported an agency, by which the poor are vaccinated gratuitously. Where a fee is charged by the profession, and the first vaccination fails, no additional fee is demanded for subsequent vaccinations. It not unfrequently fails; and I know of cases in which from two to eighteen operations have been done before success has been obtained. So far is it from a lucrative business, with the time necessary to procure vaccine matter—to make calls—to watch the progress of each case—that it is oftener a burthen on the profession—a great loss of time—than a source of income. And we all know how often a deduction is demanded from the fee, and this where it is known to the physician that such deduction is not authorized by the circumstances of those demanding the service.

These facts are given to show that epidemic smallpox must now always be the consequence of the popular neglect of the means to prevent—nay, exterminate it. This part of our subject deserves special attention, seeing that the old system of Pest Houses is done away with, and smallpox patients remain unmolested at their homes. It is in this way the time of an epidemic comes to be lengthened, and that for a long time after such constitutional atmospheric conditions as are necessary to the existence of an epidemic are no longer present, the disease still continues, as material for this always exists in the persons of the unvaccinated. The same is true of scarlet fever, which has now existed here as an epidemic for months or years. Its epidemic character is gone, and still, every week, we have one or more deaths to show that the disease is and may be indefinitely continued by the unprotected.

On the continent of Europe various means have been tried to annihilate smallpox, and in some directions, very successfully. Thus, in Prussia, in which comparatively small state, almost as large a standing army is sustained as in larger States, by frequently-repeated vaccination these large armies and their families are entirely out of the reach of smallpox. In other nations,

christening is not allowed until a certificate of vaccination is produced. So with schools, in which, although truancy is punished by fining or imprisoning parents, instead of punishing the truant, no child can enter one unless vaccinated, and yet every child is obliged to be sent to school. In America the child must be vaccinated before it can enter one; but how large is the number of children who are too young to enter, and how many of such are found among the weekly registration of deaths from smallpox?

LEUCOCYTHÆMIA.

[Translated for the Boston Medical and Surgical Journal from No. 29 of the *Allgemeine Wiener Zeitung* for 1858.—Continued from page 77.]

BY B. JOY JEFFRIES, M.D.

*Anatomical and Microscopical Examination; by Dr. JULIUS KLOB.**

BODY of medium size, pale brownish fawn color, emaciated; hair of the head brown; pupils moderately opened; neck thin; chest small; abdominal parietes moderately distended. External genitalia slightly œdematous.

Scalp pale, calvarium of ordinary thickness, having, on the internal surface of either side of the sagittal suture, small depressions the size of a pea. The dura mater moderately stretched and pale; in the superior longitudinal sinus a little fluid, thin, dirty red blood, mixed with small, yellowish-white, soft coagula. On the inner surface of the dura mater, a soft, thin, jelly-like, yellowish deposit. The pia mater infiltrated with serum, rather free from blood, and studded with Pacinian corpuscles over the upper portion of the cerebral hemispheres. In its larger, moderately-distended veins, a thin, dirty, pale-red blood. The brain moist, the cortical substance a pale reddish brown; medullary substance rather a clean white color, of soft, pasty consistence, and moderately rich in blood. Lateral ventricles somewhat dilated, holding three drachms of a clear, yellowish serum. The lining membrane of the lateral ventricles soft; the vascular plexuses pale—the capillaries of the lateral ones distended into little branches filled with a thickened serum. Base of the skull pale. In the other sinuses also a thin, fluid blood, with yellowish flocculent coagula.

Mucous membrane of the mouth and fauces pale, strewed with flakes of loosened, whitish epithelium. The thyroid gland somewhat enlarged; in its right lobe several plainly circumscribed cysts, the size of a bean, filled with a soft, pale-brown tissue, shining like colloid. The arteria thyroidea superior dextra, three lines thick, a good deal twisted, the coats thickened. Mucous membrane of the larynx pale. Jugular veins strongly dilated. On cutting into

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the right jugular comitans, the blood passed out in the form of cylinders the size of the vein, which were very soft, surrounded by a little thin, fluid blood, of a dirty brownish-red color, and mixed with numerous pale yellowish red coagula, in the form of dots or streaks and lumps; so that the surface of these cylinders looked granulated, flaky and marbled. The blood in the neighborhood, a dirty, pale red, with a greasy, viscid feel. Both lungs free, their substance pale red, throughout moderately crepitant to the touch, and holding an average amount of blood, the posterior parts somewhat richer in blood than the anterior, filled throughout with rather a coarse, frothy, pale-red serum. On cutting into the pulmonary arteries, there flowed out blood similar to that from the vena jugul. communis, whilst the blood of the pulmonary veins was a dirty pale-red, thin and mixed with but few coagula. In the bronchi, some viscid, glairy mucus, the mucous membrane with pale red injection.

In the pericardium, about two ounces of clear, yellow serum, the heart dilated, flaccid, especially the right auricle, and the ventricle of this side in the form of the greatest diastolic enlargement. On opening the right ventricle, there flowed out a mass of dirty, yellowish-red blood in lumps, thickly mixed with such coagula as were in the jugular vein. In the left ventricle, an ounce of the same blood, but more red. The left auricle nearly empty, the right crowded with the same masses of blood as in the jugul. com. The muscular tissue of the heart itself rather a dark brownish-red, of normal consistency, the endocardium thin, the valves normal, the entrance and calibre of the large vessels of ordinary dimensions.

Upon opening the abdomen, the edge of the liver was seen reaching low down, as far as the spina. ant. sup. oss. ilei. The left lobe extended into the left hypochondrium, and there covered the upper portion of the spleen. The anterior edge of the spleen reached to the median line of the abdomen, the inferior edge to the spina. ant. sup. oss. ilei sin., so that between the liver and spleen, below the navel, was a triangular space, in which were seen coils of the small intestine, covered by the great omentum, and a part of the transverse colon. The right lobe of the liver a foot long, the two lobes fifteen inches across, the right four and a half inches thick. Surface of liver smooth and shining, its substance uncommonly succulent, a pale grayish-red and rather soft. Brownish gall in the gall-bladder. The spleen weighed five pounds two ounces (4 pfund 12 loth. Wiener. Gew.), was one foot long, five and a half inches broad in the upper half, three and a half inches thick, the lower half seven inches broad and two and a half thick, the anterior edge deeply notched; on its smooth surface, at one part, the capsule appeared to be torn, and the dark-red parenchyma pushing through. Substance of the spleen grayish-red, a section pretty uniform in texture, smooth; the Malpighian corpuscles here and there swollen, and appearing as whitish projections,

the trabeculæ pretty plainly hypertrophied, and the consistence of the spleen therefore moderately hard. Near the lower end, and on the anterior edge, were cuneiform, hæmorrhagic, fatty deposits the size of a bean, yellowish, compact and brittle.

The stomach and intestines only slightly distended with gases, the mucous membrane pale; in the stomach viscid mucus—in the intestines grayish and grayish-brown mucous fæces. The aggregate as well as the solitary glands of the canal, and the mesenteric glands, not swollen. The retro-peritoneal glands, however, especially those lying in front of the lumbar vertebræ, pretty plainly enlarged, forming pale grayish-white tumors the size of a bean, their pale cortical substance differing from the grayish-red central portion; the enlargement belonging especially to the cortical substance, which, when pressed, exudes a whitish pulp.

The kidneys feel swollen, yet scarcely enlarged, their cortical substance yellowish-red, in the pyramids dark red and hard. Bladder contracted, and holding a few drachms of clear urine. Uterus somewhat enlarged, the veins dilated and filled with a pus-like blood. Ovaries shrunken.

The microscopic examination of the spleen showed a simple hypertrophy—nothing else could be found than its strong, broad trabeculæ, accumulated, colorless cells, 0.003 to 0.007 lines in diameter, and the peculiar, spindle-shaped cells of the spleen. The yellowish, thick and brittle cuneiform deposits proved to be composed of the substance of the spleen in a state of fatty degeneration, broken down fibrous tissue, and a fine molecular hæmorrhagic deposit.

The liver appeared, under the microscope, normal, namely, no perceptible alteration in its cells. The most careful examination of the surface of the liver and of a section, both with the naked eye and with a lens, did not discover the white granules spoken of by Virchow (*Ges. Abhandl.*, page 207). Yet fine sections, under the microscope, showed small collections (0.5 lines broad) of a few colorless cells and nuclei, in size 0.0027 to 0.0034 lines. No apparent alteration in the kidneys.

The swollen retro-peritoneal glands were often, in their cortical substance, of three to five lines in thickness. They appeared uniformly pale, holding cells 0.0042 to 0.0051 lines in diameter, and nuclei 0.0030 to 0.0039 lines.

I undertook to calculate the corpuscles in the blood taken from the different vessels of the cadaver (12 hours after death); previously convinced, however, that the result would be very uncertain and not at all a standard, on account of the separation that had already taken place of the different elements of the blood. The examination soon convinced me of the uselessness of my attempt. As, however, I subjected the fluid as well as the coagulated portions to repeated calculations, I will give an approximate comparison of the relation of the white elements to the red, as seemed

probable to me from the many different results. The splenic veins appeared to hold the most colorless elements; I should judge they were one half of the whole amount present. The splenic arteries carried blood not so rich in colorless blood-corpuscles as the veins. In the blood of the veins of the liver and of the pulmonary arteries, the white corpuscles appeared to me to amount to one half, whilst in the blood of the left side of the heart to one third of all present.

In general, the blood held, besides the normal red corpuscles, colorless cells 0.0078 to 0.014 lines in diameter, which appeared partly globular, but the majority somewhat oblong, the long diameter 0.002 lines more than the short diameter. The cell nuclei were large, round, and 0.0027 to 0.0053 lines in diameter, so that in some of the smaller oblong cells they appeared as large as the short diameter of the cell. The cells held nuclei partly of this description and partly oblong or biscuit shaped, about dividing. Three or four smaller nuclei were often seen in the cells, especially in the splenic veins.

There were also quite a number of free nuclei mixed with the cells, of the size and shape of the simple cell nuclei. I should estimate 10 or 15 free nuclei to every 100 colorless cells.

*Chemical Examination; by Dr. FOLWARCZNY.**

The chemical examination is divided into two parts, namely, that of the blood taken during life by venesection and the bleeding of leech-bites, and that from the cadaver.

A chemical examination of leukæmic blood, to have any claim to scientific value, will be best and most simply made by Prof. Scherer's method.

Scherer found, among other soluble constituents of the pulp of the spleen, hypoxanthin, uric acid, lactic acid, leucine, formic acid, and acetic acid. On careful examination of blood from the cadaver, in two cases of leukæmia, he found the above substances, together with gluten, and fully corroborated the opinion which Virchow gave in 1851, that the extraordinary alteration of the blood in leukæmia was in part due to its being contaminated by the elements of the spleen.

Scherer proposed a peculiar method of analysis. This we were enabled to follow exactly, in the examination of the blood from the cadaver, whilst the blood from the venesection, and partly also that from the bleeding of the leech-bites, was also examined, in divided portions, for the above-mentioned elements.

Examination of the Blood taken during Life.—(a) Blood from the venesection.

A part of this blood, which did not well divide into clot and serum, was shaken up, and another portion set aside in order to obtain some clear serum after the more complete settling of the clot.

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A small portion of the blood that had been shaken up was coagulated in boiling water, a drop of acetic acid added to completely remove the proteinate, and then placed on a filter. The clear filtrate was divided into two portions.

In one portion, after long cooling, there was no glutinous coagulation, nor was there any cloudiness, such as occurs with glutinous solutions, on the addition of spirits of wine. *Glutin, therefore, was not present.*

The other portion was first strongly concentrated, and then by drying it with nitric acid on a platina spatula, a pale-yellow flake was obtained, which scarcely reddened on adding liquor potassæ, and did not on warming give the violet color of the hypoxanthin reaction. *Hypoxanthin was therefore not present.*

A further portion of the blood that had been shaken up, was mixed with five times as much distilled water, and then a few drops of concentrated sulphuric acid added, and the whole carefully distilled.

The distillate was clear as water, and had a weak acid re-action. It was neutralized with carbonate of soda, concentrated, and then with diluted sulphuric acid again distilled.

A portion of the distillate was treated with nitrate of oxide of silver and warmed; reaction at once took place, the mixture turning black. *Formic acid was therefore present.*

Another portion of the distillate was mixed with alcohol and sulphuric acid, and on heating, gave out a smell of acetic ether, although not strong.

Possibly, therefore, a minute portion of acetic acid may have been present.

The more or less clear serum obtained from the blood that had been standing, was evaporated on a water bath, and the remainder extracted with an alcoholic solution of oxalic acid. The lactic acid present would hereby be dissolved. The solution was then digested with an excess of oxide of lead, and filtered. This filtrate, which might have held lactate of the oxide of lead, was treated with sulphuretted hydrogen. This new filtrate could then only hold *free* lactic acid. It was then boiled with oxide of zinc, again filtered, and the filtrate brought to crystallization.

The peculiar club-shaped crystals of lactate of oxide of zinc were produced. The analysis thus proved the existence of lactic and formic acid. The presence of acetic acid was doubtful. Glutin and hypoxanthin were not present.

(b) Blood from the bleeding of leech-bites.

Lactic and formic acid were found. On evaporating the filtrate, obtained from boiling the coagulated mass of blood, were found in addition, beautiful crystal of tyrosin. Glutin, leucine, hypoxanthin were not found. The presence of acetic acid could not be determined, because a drop of this acid had to be added to cause complete coagulation.

Examination of the Blood from Cadaver.

The following were examined. (a) Blood from the splenic veins.
 (b) do. do. veins of the liver.
 (c) do. do. jugular vein and right side of the heart.
 (d) do. do. aorta and left side of the heart.

We give here, first, the general result of the examination, and, at the end, that of the different portions of blood.

The portion to be examined was thoroughly triturated, so that it was of more or less uniform consistence, then the necessary quantity of distilled water added, and the whole boiled for some time. After careful cooling and settling it was filtered, and the clear filtrate tested for proteinate. If it had been completely freed from it (if necessary a drop of acetic acid must be added before filtering), the filtrate was brought to the consistence of a thin syrup, and kept cold several days. The presence of gluten was then proved by the gelatinous coagula and precipitate of the fluid with alcohol. Scherer found in the bottom of the evaporating dish a yellowish-white residue. The fluid is to be decanted and set aside, the yellowish-white precipitate washed on the filter, and now tested for uric acid and hypoxanthin.

The best way is to treat the dry yellowish powder with ammonia. Any hypoxanthin that may happen to be present is dissolved out, and uric acid falls as urate of ammonia. The remaining insoluble portion will be now tested for uric acid by the murexyd test. The ammoniacal solution is to be left to evaporate naturally, and the residue tested for hypoxanthin with nitric acid and liquor potassæ.

The fluid that was decanted from the yellowish white precipitate, and had been set aside, is somewhat further evaporated, and to it added a drop of the fluid concentrated by natural evaporation; the residue is then to be carefully examined under the microscope. Scherer found chloride of sodium and globules of leucine.

The fluid will now be evaporated to a thick syrup, dissolved in a little water, and mixed with absolute alcohol. Some leucine then crystallizes on the sides of the glass. The alcoholic solution of leucine is decanted from the uncrystallizable precipitate and divided into two portions.

One portion will be treated with a solution of nitrate of the oxide of silver, whereby a greater part of the added salts of silver being insoluble in nitric acid, will be thrown down as chloride of silver, yet the presence of formic acid will be shown by the quick reduction of the excess of nitrate of silver, on warming. The formation of crystals of the acetate of the oxide of silver, or the distillation of the fluid, with the addition of a few drops of concentrated sulphuric acid, and testing the distillate for acetic acid,

determines the presence of acetic acid in the blood under consideration.

To the other portion of the alcoholic solution will be added small amounts of concentrated sulphuric acid, till a white cloud is formed by the sulphate, from which it is to be filtered. The filtrate is to be boiled with the carbonate of lime, filtered, evaporated to dryness, extracted with alcohol, and to it a little ether added. The formation of crystallized lactate of lime proves the presence of lactic acid.

So much for the method of examining, and now follow the results with the separate portions of blood. Here has also been added a quantitative analysis of the blood from the splenic veins and aorta, for water and the incombustible salts.

(a) Blood from splenic veins.

In 1,000 parts. Water, 765.210

Solid substances, 234.790

1,000.000

Solid substances, 234.790.

Inorganic, 11.692

Organic, 223.098

234.790

Glutin was not found. The murexyd test showed a small amount of uric acid. The hypoxanthin test gave a yellow flake that reddened with liquor potassæ, yet on warming it, only a slight tinge of violet was seen. The presence of hypoxanthin was therefore doubtful. Leucine was not found. Formic acid was present, but no acetic or lactic.

(b) Blood from the veins of the liver.

Formic and lactic acid were found; glutin, uric acid, hypoxanthin, leucine and acetic acid *not* found.

(c) Blood from the jugular vein and right side of the heart.

Uric and formic acid were met with; glutin, leucine, acetic and lactic acid and hypoxanthin could *not* be discovered.

(d) Blood from the aorta and left side of the heart.

In 1,000 parts. Water, 795.005

Solid substances, 204.995

1,000.000

Solid substances, 204.995.

Of these, inorganic, 12.076

organic, 192.919

204.995

No glutin, uric acid, acetic acid or hypoxanthin were found, but formic acid, lactic acid, and a good deal of leucine in beautiful crystals, were met with.

We found, therefore, in leukæmic blood, no glutin in any examination; hypoxanthin and acetic acid only in one (splenic veins—V.

mediana), and then doubtful; uric acid in minute quantity in one examination (ven. jugul.); tyrosin and leucine each found once (capillary blood, aorta); formic acid in all cases; lactic acid in the greater number of experiments (ven. median, capillary blood, veins of the liver, aorta).

The quantitative analysis of the water and solid substances, and of the organic and inorganic constituents of the latter, scarcely differs from that of normal blood, as Scherer also found.

For the literature of the chemical examination of leukæmic blood, are to be mentioned, *Verhandlungen der phys. Medizinischen Gesellschaft in Würzburg*, Bd. II., No. 21, in Bd. VII., Heft. I.

ON DIPHTHERITIC PARALYSIS.

BY DR. MAINGAULT.

VARIOUS French authors have drawn attention to the fact that paralytic affections occur as sequelæ of diphtheria, or rather of the disease to which Bretonneau has given the name diphthérie. Dr. Maingault discusses the subject fully, and adduces numerous cases in illustration of his remarks. The following is a brief summary of the account which he gives:—Two or three weeks after all throat affection has disappeared, the first symptoms of paralysis show themselves; they are developed slowly; the patients may even have made considerable progress towards recovery before they occur. The first thing noticed is a paralytic affection of the soft palate, characterized by a difficulty of deglutition and a nasal speech—phenomena that may entirely disappear when the general muscular weakness shows itself. In some patients there is sudden emaciation. Vision becomes imperfect, and even complete blindness may supervene. The strength fails gradually; formication occurs in the extremities, accompanied by more or less severe pains in the joints. Walking becomes more and more painful, until the upright position is impossible. The paraplegia is then complete. The upper extremities partake in this weakness, the head becomes too heavy and sinks on the chest, the muscles of the trunk are incapable of sustaining the weight of the body. Strabismus, distortions of the face, dribbling, defective articulation, and paralysis of the bladder and rectum also supervene. There is an entire absence of fever, the pulse is small, and is reduced even to fifty; at the same time the heart's action is tumultuous, and there are anæmic murmurs. With these and other symptoms of defective innervation, the intellect remains intact, but the mental powers are sluggish. The disease may proceed to a fatal termination, or if it terminates favorably, the patient's strength returns gradually, and a cure is effected in a period varying from two to eight months.

Dr. Bouillon-Lagrange, in one of a series of articles on angine

couenneuse, contained in the "Gazette Hebdomadaire," also draws attention to diphtheritic paralysis, of which he adduces four cases. He regards it as a complication occurring mainly in the adult, that its duration is from two to three months, that the effect of treatment is very doubtful, and that it depends upon a serous alteration of the blood, the restoration of which is essential to recovery. Dr. Bouillon-Lagrange asks why this important complication has scarcely been noticed in previous epidemics, and is inclined to attribute it to the modifications in the epidemics of 1857 and 1858 by the continued dryness of the atmosphere which accompanied their development and progress.—*Brit. and Foreign Medico-Chirg. Review, from Arch. Gén. de Méd.*

A CASE OF NEW FORMATION OF GREY CEREBRAL MATTER.

BY DR. C. TUENGEL, OF HAMBURGH.

A FEMALE, aged thirty-one, was brought into the Hamburg Hospital on the 26th November, 1858, in a state of sopor; she only gave short replies when repeatedly questioned, and without having understood the questions; she occasionally uttered brief exclamations. When attempts were made to open the eyes, she closed them convulsively; attempts at moving any of the limbs were resisted, but this was easily overcome, except the spasmodic contraction of the right hand. There was a dislocation of the right arm inwards. Respiration was accelerated, but no disease could be discovered in the lungs. As the patient was considered to be moribund, no treatment was adopted, except the application of a blister to the chest. She died six hours later, and it was afterwards ascertained that she had been subject to dislocation of the arm, that she had been indisposed and peculiar in her manner for four weeks previously, during which time she had been seen only once by a medical man, who considered her hysterical. There were various rickety distortions in the trunk and lower extremities. The vessels of the dura mater and pia mater and the cerebral tissue contained much blood; the arachnoid was not opaque, and there was a considerable amount of reddish watery exudation under it. The lateral ventricles contained a little fluid of the same kind. At the point where the upper wall of the lateral ventricle bends down, there were, on the outer side, between the middle and end of the posterior horn, several hemispherical tumors projecting into the cavity, varying in size, and on section apparently identical in hue and consistency with grey cerebral matter. These deposits extended into the medullary tissue, so as to form circular tumors, which were separated from one another by intervals of white matter. The deposit was greatest at the end of the posterior horn, and here the consistency of the brain was most developed. Both lateral ventricles presented the same appearances. There

was no other abnormality in the brain. The microscopic examination of the new formation exhibited a fine granular mass with granular cells; nerve tubes were not seen. From the remainder of the autopsy, we merely note that the uterus was divided into two compartments by a septum, that there were two cervices and two vaginae, with a single circular hymen.—*Ibid.*, *Archiv. für Path. Anat.*, &c.

Bibliographical Notices.

A Practical Treatise on Fractures and Dislocations. By FRANK HASTINGS HAMILTON, M.D., Professor of Surgery in the University of Buffalo; Surgeon to the Buffalo Hospital of the Sisters of Charity; Consulting Surgeon to the Buffalo General Hospital, and to the Buffalo City Dispensary. Illustrated with Two Hundred and Eighty-nine Wood-Cuts. Philadelphia: Blanchard & Lea. 1860. Pp. 757.

THIS important work has been long looked for, and will be heartily welcomed in every quarter of our country. And not only so, but we are greatly mistaken if it does not command distinguished respect and obtain enviable distinction abroad. Let us say, at once, that it is emphatically *the* book upon the subjects of which it treats, and we cannot doubt that it will continue so to be, for an indefinite period of time.

The work of Malgaigne, admirable and complete as it is, does not cover much of that ground which is at once and completely occupied by Dr. Hamilton. The latter author has placed before us all that American surgery offers upon the deeply interesting topics which form the subject of his excellent treatise. This, by reason of the difficulty of access to the various reports of cases and methods of practice, the French surgeon was to a great extent precluded from doing, even had he thoroughly attempted it. Dr. Packard, of Philadelphia, has rendered the profession good service in translating a portion of this great work; and it is to be hoped that he will give us the remainder in an equally satisfactory style. As Dr. Hamilton very truly says, in his prefatory remarks, "the contributions of American surgeons to this department had to be sought chiefly in medical journals, many of which have long been discontinued, and most of which were inaccessible to the French writer. Even to an American, the labor of exhumation from archives hitherto almost unexplored, has not been small; and it is probable that many valuable papers have been overlooked; indeed, it is impossible that it should be otherwise."

While we should rejoice, therefore, that an American surgeon and writer has been found, so fully competent to present all that is valuable upon the subjects considered, which appertains to American sources, we ought to be fully as much pleased that we have embodied in the available form of a volume, the results of the author's very extended experience, and the carefully prepared opinions upon these difficult and often very embarrassing surgical points, which his close observation and study have so well fitted him to enunciate.

It is not many months since we had the pleasure of seeing certain

portions of this volume printed in the JOURNAL; and, as we believe, much to the satisfaction of its readers. And here we may appropriately mention the excellent and healthy influence which Dr. Hamilton's occasional papers have had, to our own personal knowledge, upon the community at large, no less than upon medical and legal men, in regard to the custom of prosecution for alleged malpractice, whenever a surgeon's work—however well and conscientiously done—did not meet the views and expectations of the patient and his friends. This volume, no less than other testimony* given by the learned and skilful author, will tend yet more to ratify and extend these good results.

Dr. Hamilton's labors have been nearly equally divided between the subjects of Fractures and Dislocations—a somewhat larger space having been accorded to the consideration of the former. In a general point of view, he divides fractures into their classes, gives their etiology, semeiology and diagnosis, then treats of the "Repair of Broken Bones," and the measures to be adopted for the management of these lesions. Next comes an account of "Delayed Union, and Non-Union of Broken Bones"; and, immediately succeeding, we have a chapter on the "Bending, Partial Fractures, and Fissures of the Long Bones." In this portion of the work we have been particularly interested—partly from having had, not long since, a case of bending of the bones of the left fore-arm, in a young child—the angle being an obtuse one, but very nearly approaching one of 45 degrees. No crepitus was heard or felt, and reduction was easily accomplished, reminding one of bending back an osier or willow twig—the result being excellent, and no pain or inflammation occurring.

Next in order, Dr. Hamilton takes up the special fractures and separately considers them. The Cartilages of the Larynx, and their fractures, are treated of in Chapter XIV. Chapter XV. is devoted to a most important subject, and contains a vast amount of valuable information—the topic is "Fractures of the Vertebrae." We have perused this chapter with great satisfaction, and feel that the author's research has been faithful and extensive, while his directions are wise and eminently judicious. We quote a few sentences relative to the treatment of that serious accident, *fracture of the vertebral arches* :—

"If the fragments are not displaced, nothing but rest and a cooling regimen are indicated; but if they are forced in upon the marrow, an important question is presented, and which has received from different surgeons different solutions. Shall an effort be made to reduce the fragments? and if so, by what means shall the indication be attempted?"

"It will be remembered that in nearly all of these cases we must remain in doubt, even after the most careful examination, as to the actual condition of the fracture. It may be that what we suppose to be a fracture of the arch is only a fracture of the apophysis, or that on the other hand it is a fracture of the body of the bone itself, and if we are expert enough to make out clearly a fracture of the arch, it is not possible for us to say that the body is not broken also, indeed it is quite probable that it is broken. With a diagnosis so uncertain, can we ever find a justification for surgical interference? Mr. Cline and Mr. Cooper thought that we might. According to them, the case presents in no other direction a point of hope or encouragement. Death is inevitable, sooner or later, if the fragment is not lifted, and we can scarcely make the matter any worse by interference. If it proves to be a fracture of the apophysis, as happened to be the case in a patient upon whom Sir Astley operated, our interference was unne-

* See "Report on Deformities after Fracture," &c. &c.

cessary, but it has done no harm. If the body of the bone is broken, the operation affords no resource, but the patient is probably beyond suffering damage at our hands. If the diagnosis is correctly made out and the arch only is broken, and if, as was the fact in the case of Larkin, already mentioned, there is no bloody effusion, or laceration of the membranes or of the marrow, and if the concussion was not sufficient to determine much inflammation of the cord, then it would seem possible that an operation might save the patient."—Pp. 152, 153.

We have made the above somewhat lengthy extract for the purpose of showing the clear and practical style of the author, and the efficient manner in which he investigates his subject. He is always straightforward, business-like, and replete with common sense; and the apparatus and appliances which he has devised, and his methods of treatment generally, are characterized by the exhibition of much genuine tact, by simplicity, good adaptation and a sensible avoidance of unnecessary, tiresome and injurious complications.

We cannot pause to follow the author, as he moves carefully on, from "the crown of the head to the sole of the foot," and thence out to the extreme phalanges, in his minute and comprehensive account of the solutions of osseous continuity. If we were to further signalize any portions of his book as particularly worthy of notice and study, they would be the eighteenth chapter, which is a highly satisfactory and useful collection of facts and methods relative to the accident of fractured clavicle and its treatment: the twentieth chapter, on Fractures of the Humerus—and especially that part of it which contains an enumeration of the signs which establish points of differential diagnosis; the twenty-eighth chapter, comprising ninety pages, full of valuable information upon "Fractures of the Femur" and their management; and the succeeding chapter, devoted to "Fractures of the Patella."

When we intimated, a while since, that our author had taken into consideration every bone in the system, "from the crown of the head to the sole of the foot," we should have thrown in the reservation which we will now make. Fracture of the *cranial* bones has no special chapter, nor even a paragraph, that we can discover, accorded to its history and study. There are, it is true, isolated remarks concerning fracture of the bones of the skull, and which are rendered necessary by their relation to other neighboring bones whose fracture is discussed; but we confess that we are unable to see any valid reason for excluding the cranial bones from particular mention in a general treatise upon fractures. They certainly deserve this special attention more than the bones of the *face*, which have five chapters allotted to them. Malgaigne passes by the cranial bones in the same manner. Observing this fact, we asked ourselves, and put the question to others also, whether this arrangement is due to some reason already known and needing no announcement—we do not precisely understand the why and the wherefore, and, confessing our ignorance, ask to be enlightened. In a systematic treatise on fractures, it would seem that fractures of the skull ought to head the list! That very serious injury, *fracture of the base of the skull*, has not, as it seems to us, received from writers the amount of consideration which it merits. The systems of surgery accord it but comparatively small space; and notwithstanding the almost uniformly desperate character of the lesion, it deserves a closer study and a fuller description. Among other points, it is generally announced that hæmorrhage from the ears con-

stantly accompanies this fracture—an assertion contradicted by many cases within the cognizance of the profession; and among others, we may refer to those reported by Dr. J. M. Warren and Dr. Samuel Cabot, Jr., to the Boston Society for Medical Improvement.—(See *Society's Transactions*, Vol. II., p. 28, and Vol. III., p. 235.) Any one who would write a careful monograph upon this fracture, could furnish the profession with much interesting and important information.

We are constrained to give expression to our surprise at that portion of Dr. Hamilton's remarks upon fracture of the radius, where he espouses the opinion of a single surgeon against that of seven others, among whom are enumerated some of our most skilful and careful practitioners. We refer to the case narrated on the two hundred and ninety-second page, where gangrene followed compound fracture of the radius, and was ascribed by Dr. Pillsbury, of Lowell, Mass., to over-tight bandaging; whilst Drs. Hayward, Bigelow, Townsend and Ainsworth of Boston, and Drs. Kimball of Lowell, and Loring and Pierce of Salem, "believed that the death of the limb was due to some injury done to the artery near the shoulder-joint; and in no other way could they explain the total absence of pain during the first two days; nor could they regard this condition as consistent with the supposition that the bandage occasioned the death of the limb." (*Loc. cit.*) Dr. Hamilton sides with Dr. Pillsbury—who, for aught we know to the contrary, may be a very competent surgeon, but whom we should be slow to believe compounded of enough wisdom to outweigh the evidence of the gentlemen who testified on the other side—even with our erudite author to back him. And, with due respect to Dr. Hamilton—which we know he will credit us with—we must again express our surprise at his unqualified verdict "that the gangrene was alone due to the bandages;" and this, too, pronounced from a distance, and under the disadvantage of never having been brought into intimate relation to the circumstances of the case. His reference to a case "which came under his own observation," as justifying this positive opinion, merely because there was no pain until the bandages were unloosed—the arm subsequently separating at the shoulder-joint—is hardly sufficient to countervail the careful and deliberate decision of the surgeons above mentioned; besides that they were so situated as to be fully acquainted with the individual facts bearing on the case. Neither does his reference to subsequent observations at page 320, improve his position—to our mind, at least. He says:—"Sometimes also it [gangrene] may be due rather to the severity of the original injury, which the experience of every surgeon will prove, is occasionally competent to the production of such bad results." He then mentions wounding of an artery by splintered bone, &c., the same sort of lesion decided by the surgeons we have cited, to have been causative in the case of the boy from Andover. Why is Dr. Hamilton so unwilling to allow the influence of this cause in that particular case, especially when the evidence is as seven to one, and of undoubted quality? The wounds accompanying the fracture of the radius are stated to have been severe, and there were several of them—one being over the point of fracture. There have been enough palpable instances of injury of this sort from tight bandaging, as Dr. Hamilton himself relates, without forcing this one into the list, in the face of such strong testimony. We have written thus much about this case, simply from considering what appear to us to be its merits, and with-

out any personal knowledge of the patient, his friends, or of the surgeon who first dressed the fracture.

Part II. consists of two hundred and seventy-three pages, and is wholly occupied with the subject of Dislocations. Very much the same order is adopted in considering this class of injuries, as has been mentioned was chosen for the former. The "General Considerations" comprise General Division and Nomenclature, General Predisposing Causes, Direct or Exciting Causes, General Symptoms, Pathology, General Prognosis and General Treatment. The matter of *prognosis* is one which must strike every professional reader as of immense importance, both in fractures and in dislocations—and not only to the patient, but to the surgeon. And here we would repeat how important we consider it to be that the community at large should know the honest and boldly expressed opinion of competent surgeons on this point, so that there may be less chance for those unjust and malicious suits-at-law which have been from time to time undertaken, where some deformity has unavoidably remained after even the most skilful treatment. Dr. Hamilton has, as we have intimated, long before the publication of this treatise, rendered the profession justice in this respect; and we may venture to recommend a perusal of many portions of the present volume, no less than of other writings by him, to gentlemen of the legal profession.

Obliged as we are to refrain from lengthy quotation, we find some consolation in not so doing, in remembering that our readers have had—as we stated early in this article—a taste of the author's quality; and we feel so sure that this book will stand upon the shelves—we mean, rather, lie upon the tables and close under the hands—of every practising surgeon in our land, that we the less regret our inability to transcribe more from its pages. All of the chapters upon Dislocations are replete with interest; and it would be invidious to refer to any as possessing peculiar merit. We have been more particularly interested in the Seventh, on "Dislocations of the Head of the Radius"; and in the Ninth, on "Dislocations of the Radius and Ulna (Fore-arm at the Elbow Joint)." Dr. Hamilton refers to the great difficulty often experienced in reducing a complete dislocation of the head of the radius forwards, and quotes several distinguished surgeons on this point, and on the frequency of relaxation. Even partial luxation or subluxation, is an accident of no inconsiderable gravity, and is nearly always troublesome to cure definitively. In a case of this latter nature, recently occurring to us, the normal condition of the joint was re-established under ether, and, at the end of three weeks, the apparatus applied at the time of the accident was removed. The joint was long stiff, and forced motion, with frictions, was required for several weeks longer—having been gradually and gently practised during the last week of retention of the splint. The motions are perfectly restored, and there has been no attempt at relaxation. The signs of the accident were very marked. The advice of Dr. Hamilton is, that the arm be flexed and put in a sling, "or if the radius is disposed to become relaxed, a right-angled splint ought to be placed upon the back of the arm and forearm, and by the aid of a compress and roller, an attempt should be made to retain it in place" (p. 574). In the case above mentioned, an angular splint was used, but it was adapted to the *inner* aspect of the arm and fore-arm. Cannot as good a result be obtained by such an arrangement as by the other? or is the other the

best way, and have we gone contrary to authority? If so, we are fortunate in the result.

Chapter XVI. is upon Dislocations of the Thigh (Coxo-Femoral), and is very full. The *illustrations* in this chapter, as indeed throughout the book, are excellent, and very finely executed, thus testifying at once to the good judgment of the author and the capital workmanship of the engraver. We were surprised to observe that no acknowledgment is made to our townsman, Dr. L. M. Sargent, Jr., who—as a friend has just informed us—furnished the drawings of Dr. Flagg's thigh apparatus (see pages 411, 412); and of which the engravings are a very faithful copy.

Not the least interesting portion of the volume is the last chapter, upon "Congenital Dislocations"; the whole of it shows careful study and zealous search after information, and is a fitting conclusion to the work.

We are well aware that Dr. Hamilton's large and recondite treatise, the fruit of so much patient labor and the repository of so much truly invaluable information and experience, deserves infinitely more at our hands than we have space for in this JOURNAL. Elsewhere, it will doubtless receive that extended and thorough notice and review which it so signally deserves. When we say, however, that we believe it will at once take its place as the best book for consultation by the practitioner; and that it will form the most complete, available and reliable guide in emergencies of every nature connected with its subjects; and also that the student of surgery may make it his text-book with entire confidence, and with pleasure, also, from its agreeable and easy style, we think our own opinion may be gathered as to its value. The author deserves the best thanks of the profession for his substantial and scholarly contribution to surgical knowledge and science; and the publishers merit all praise for the elegant manner in which they have issued the volume. One or two typographical errors call for remark, chiefly from the fact that they regard proper names. Thus the name of M. Sautin, of Brussels, is persistently spelled *Suetin*—a mere transposition of a letter, it is true, but worth correcting. Dr. George Hayward, Sen., of Boston, has his name transformed into *Haywood*; and the late Dr. Peirson's is, in one place, printed *Pierson*—in another it is rightly spelled. The general freedom of the letterpress from mistakes is very noticeable. On page 279, for "*Générale*," read *Générales*. We have not sought for errors, and these are the only ones which have caught our eye in our examination of the book. We might, properly enough, challenge our author's usage of the word "apparel," when he should have written "*appareil*"—which he certainly must have meant to do, since "apparel" is hardly an applicable term for surgical dressings; and if the French word were to be Anglicised, it would, we conclude, be rendered *apparatus*; and which, at any rate, we consider the best term for the appliances referred to. We trust, moreover, not to be deemed hypercritical, if we look hard at such a word as "epiphysary" (page 385), and, after due consideration, decide that we never saw it before. The volume is for sale at Messrs. Ticknor & Fields' store, and, as we conclude, by several other booksellers in the city.

W. W. M.

 THE BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON: THURSDAY, MARCH 1, 1860.

NEW YORK STATE MEDICAL SOCIETY. *Report of the Committee on the subject of a "Second Degree in Medicine."*—We have received the report of the above committee, and see, as might have been anticipated, from the nature of the subject upon which they are engaged, that no definite conclusion has been arrived at. The report is mainly occupied by a sketch of the efforts made to elevate the standard of medical education, and of the difficulties which have so long prevented the consummation of the wishes of those who have had the interests of the profession most at heart. Almost since the organization of the Society, its attention has been directed to this important subject, and many honored names are connected with the attempts to effect certain reforms. These efforts have been partially successful; but, say the committee, "when legislative action virtually legalized quackery by granting equal privileges to the educated and the ignorant, a damper was put upon our efforts, and the friends of medical education, despairing of aid from government, were thrown upon their own resources." However sad it may be to reflect upon such a perversion of legislative power, it seems that the real difficulty lies, where it has always lain, within the ranks of the profession itself. The Committee continue:—

"We have had ten able reports, occupying nearly 260 pages, the result of the labor of about sixty gentlemen appointed on Educational Committees, and these, too, from among our most talented members, and yet here we stand to-day with not a single college carrying out fully the plans proposed, and the Association still engaged in the same work of trying to do something in the same direction. Not that there has been no improvement, no onward, upward movement, in the great body of our profession. By no means; for even a casual observer must admit progress in the right direction. As regards the interest felt by medical men in one another, we stand to-day on a higher, much higher elevation than we did fifteen years ago, when, upon this floor, the resolutions were offered and adopted to attempt the organization of a National Society.

"Solid medical attainments are held in higher estimation among ourselves, if not also among an intelligent community. A healthy spirit of emulation is abroad in our ranks, and our junior brethren especially are no longer satisfied with merely following in the footsteps of their immediate predecessors. This spirit of improvement is much more manifest and vastly more extensive at this moment than it ever was before. There is a marked advance in every branch of medical science, whether we survey those branches which are strictly medical, or those merely collateral. Medical men, too, certainly understand each other better than formerly, and professional courtesy being better understood, is more generally practised. But in the attempt of the American Medical Association to direct the curriculum of studies in the Colleges, and fix the period of their continuance—the time to be spent in study—either preliminary or professional, there seems to be at least a partial failure."

One cause of this is the unwillingness of States and Colleges to yield to the Association the power which they have so long held of conferring degrees. This question is discussed, in the Report before us, with great moderation and fairness.

"Unless this power can be delegated by all the States to the American Medical Association—and that can hardly be expected to occur when we consider who holds the reins of government—it seems futile to calculate upon anything more than a voluntary compliance with any requisitions the Association may see fit to make, unless the Association is ready to enforce the rule, making compliance therewith a test of membership. To make and enforce such a rule, the Association has an undoubted right; but would it be expedient at present? Would it not be a retrograde movement instead of a movement in the right direction? Are we ready to advise the Association to such a step? That some would vote in the affirmative, should the question come before us, there can be no doubt; but your committee are of opinion that the affirmative vote would be very light should time sufficient be taken for mature reflection.

"To enforce such a rule, would be to cut off, at one swoop, nearly all our Colleges, and with them some of the brightest ornaments of our profession. To your committee, it would seem almost like a death-blow to that cherished organization we all so much honor, and which, we trust, is destined to shed its benign influence upon our profession, our country and the world, long after those of us who were humble instruments in its formation shall have been gathered to our fathers.

"Another obstacle in the way of reform arises from the self-complacency of the respective States and Colleges in their own rules and regulations. While most of the Colleges see in others evils which need correcting, there are found but few, if any, that are willing to acknowledge that within their own organization there is any room for improvement."

These difficulties are such as have always been experienced under similar circumstances, and cannot be dealt with hastily. Time will undoubtedly, however, produce that change of opinion which has enabled the profession in England to secure laws which must be of the greatest possible advantage to themselves and the public. On the first of June next, the question is to be again discussed in New York, and we hope that the committee will then be able to report still further progress.

HEALTH OF BOSTON.—It will be seen by the mortality table that the deaths for the past week were 94—being 16 over the number for the week previous, and considerably above the average for the corresponding week of the last ten years. This increase must be attributed, in part, at least, to the deaths from lung fever and scarlet fever—the mortality from consumption and smallpox also being rather above than below that for some time past.

MASSACHUSETTS MEDICAL COLLEGE.—The Annual Commencement for the conferring of medical degrees will take place at the College on Wednesday, March 7th. The exercises will commence at 11 o'clock, A.M., with a prayer by Professor Huntington, after which graduates will read selections from their dissertations. The degrees will then be conferred by the President, and the whole will conclude with an address by Prof. Edward H. Clarke.

The Corporation and Board of Overseers of the University will be present on the occasion, and the Fellows of the Massachusetts Medical Society, all medical students, and all persons who may be interested in medical science, are hereby respectfully invited to be present.

D. HUMPHREYS STORER, M.D.,
Dean of the Medical Faculty.

Wednesday, February 29, 1860.

A NAVAL MEDICAL BOARD will meet at the Naval Asylum, Philadelphia, on the first day of March, for the examination of assistant surgeons for promotion, and of candidates for admission into the Navy. The board will consist of Surgeons James M. Greene, W. S. W. Ruschenberger, and J. M. Foltz. The examination of assistant surgeons for promotion will precede that of candidates for admission, and will probably occupy two or three weeks.

HOSPITAL STATISTICS OF PARIS FOR 1860.—The report of the Préfet of the Seine announces that in Paris, during the year 1860, 7172 beds will be prepared for the sick, 7838 for the old and infirm, 2195 for the insane, 609 for foundlings; in all, 17,814 beds; to which should be added 50 contained in two little asylums for the old, belonging to the former communes of Montmartre and Belleville. During the ensuing year 5,924,646 enrolments of sick and infirm are anticipated. Besides these, 1600 insane persons, for want of room in Paris, will be supported in county asylums; 14,422 children are placed with private persons, in private establishments, and in the agricultural colonies of France and Algiers; and, in addition, 6900 children will receive out-door relief, and remain under the paternal surveillance of the Administration of Public Relief.—*London Lancet*.

MEDICAL USES OF THE PALM-TREE.—The medical uses of the palm-tree are said to be numerous in West Africa, by a gentleman who has undertaken to describe them. The roots are used, he says, for various medicinal purposes, but chiefly to cure bilious attacks. The oil of the nut he states also to be an excellent medicine. In some diseases, more especially smallpox, it is administered both internally and externally. As an external application it is used for wounds, bruises, and burns. In cases of guinea-worm it is applied to the poultices.—*lb*.

ALL essays for the prize offered by the American Medical Association, must be sent, on or before April 1, to some one of the Committee, who are, Drs. W. Hooker (Chairman), New Haven, Conn.; G. C. Shattuck, Boston, Mass.; Usher Parsons, Providence, R. I.; P. A. Jewett and Jonathan Knight, New Haven.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, FEBRUARY 25th, 1860.

DEATHS.

	Males.	Females.	Total.
Deaths during the week,	47	47	94
Average Mortality of the corresponding weeks of the ten years, 1850-1860,	39.6	39.1	78.7
Average corrected to increased population,	89.7
Deaths of persons above 90,

METEOROLOGY.

From Observations taken at the Cambridge Observatory.

Mean height of Barometer, 29.877	Highest point of Thermometer, 58
Highest point of Barometer, 30.358	Lowest point of Thermometer, 9
Lowest point of Barometer, 29.174	General direction of the Wind, SW.
Mean Temperature, 31.00	Whole amount of Rain in the week,494

Communications Received.—Occlusion of the Vagina.—Rupture of the Uterus.—Case of Retinal Detachment, from Concussion.

Books and Pamphlets Received.—An Epitome of Braithwaite's Retrospect of Practical Medicine and Surgery. Part I. By Walter S. Wells, M.D. (From the Publisher).—Tenth Annual Report of the Association for the Relief of Aged Indigent Females.—Championnière's Journal of Practical Medicine and Surgery. (From A. Williams & Co., Special Agents).—Memoirs on the Salubrity of the Isle of Pines. By Dr. Don José de la Luz Hernandez, Physician and Surgeon of the Royal House of Beneficencia and Foundling Hospital, &c., Habana. (From the Author).—Introductory Lecture to the Class of the Female Medical College of Pennsylvania. By Ann Preston, M.D. (From the Author).—On the Difficulties and Advantages of Catheterism of the Air-Passages in Diseases of the Chest. By Horace Green, M.D., LL.D., &c. (From the Author.)

Deaths in Boston for the week ending Saturday noon, February 25th, 94. Males, 47.—Females, 47.—Accidents, 3—apoplexy, 1—asthma, 1—inflammation of the bowels, 1—ulceration of the bowels, 1—bronchitis, 1—congestion of the brain, 1—inflammation of the brain, 1—consumption, 16—convulsions, 1—croup, 4—dysentery, 1—dropsy, 2—dropsy in the head, 5—debility, 4—puerperal disease, 1—scarlet fever, 8—typhoid fever, 1—gravel, 1—disease of the heart, 1—congestion of the lungs, 2—inflammation of the lungs, 10—marasmus, 5—neuralgia, 1—old age, 1—pleurisy, 1—premature birth, 3—scalded, 1—smallpox, 7—teething, 1—unknown, 7.

Under 5 years, 48—between 5 and 20 years, 7—between 20 and 40 years, 11—between 40 and 60 years, 14—above 60 years, 14. Born in the United States, 75—Ireland, 16—other places, 3.